



# Columbine Exploration Corp.

SUITE 718 GUARANTY BANK BLDG. • 817 17TH STREET • DENVER, COLORADO 80202  
303/573-9302

August 22, 1980

Division of State Lands  
Donald G. Prince  
Room 411 Empire Building  
231 E. 400 S.  
Salt Lake City, Utah 84111

Re: #1 State-Grynberg Well  
Permit to Drill  
Hatch Prospect  
San Juan County, Utah

Dear Sir:

Enclosed please find the above captioned permit along with a copy of the surveyor's plat. A drilling bond has been ordered today.

If you need any additional information, please contact me as soon as possible.

When said application has been approved, please return one copy to Columbine Exploration Corp. at the above address.

Thank you for your cooperation.

Sincerely yours,

COLUMBINE EXPLORATION CORP.

Penny McIver  
Accountant

pm  
enc.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK <b>DRILL</b> <input checked="" type="checkbox"/> <b>DEEPEN</b> <input type="checkbox"/> <b>PLUG BACK</b> <input type="checkbox"/>			5. LEASE DESIGNATION AND SERIAL NO. ml 2716 2 Utah #72162	
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>			6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
2. NAME OF OPERATOR Columbine Exploration Corp.			7. UNIT AGREEMENT NAME	
3. ADDRESS OF OPERATOR 817 17th Street, Suite 718, Denver, Colorado 80202			8. FARM OR LEASE NAME State - Grynberg	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface C SE 1/4 NE 1/4 At proposed prod. zone C SE 1/4 NE 1/4			9. WELL NO. #1	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 7 mi. North, 2 mi. West of Hatch Trading Post			10. FIELD AND POOL, OR WILDCAT Hatch	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 660' W			11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 16, T38S-R24E	
16. NO. OF ACRES IN LEASE 640			12. COUNTY OR PARISH San Juan	
17. NO. OF ACRES ASSIGNED TO THIS WELL 160			13. STATE Utah	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. none			20. ROTARY OR CABLE TOOLS Rotary	
21. ELEVATIONS (Show whether DF, RT, GR, etc.)			22. APPROX. DATE WORK WILL START* October 10, 1980	

## 23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/2"	8 5/8"		300'	210 sx + 2% cacl
7 7/8"	5 1/2"		6000'	1#/ sack cello flake; 300 sx

We propose to drill a 6000' Desert Creek test, run Dual Induction Lateralog, FDC CNL Caliper. Test all shows of oil or gas, complete using 5 1/2" casing if productive.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED Albert L. Richardson TITLE President DATE 8/20/80

(This space for Federal or State office use)

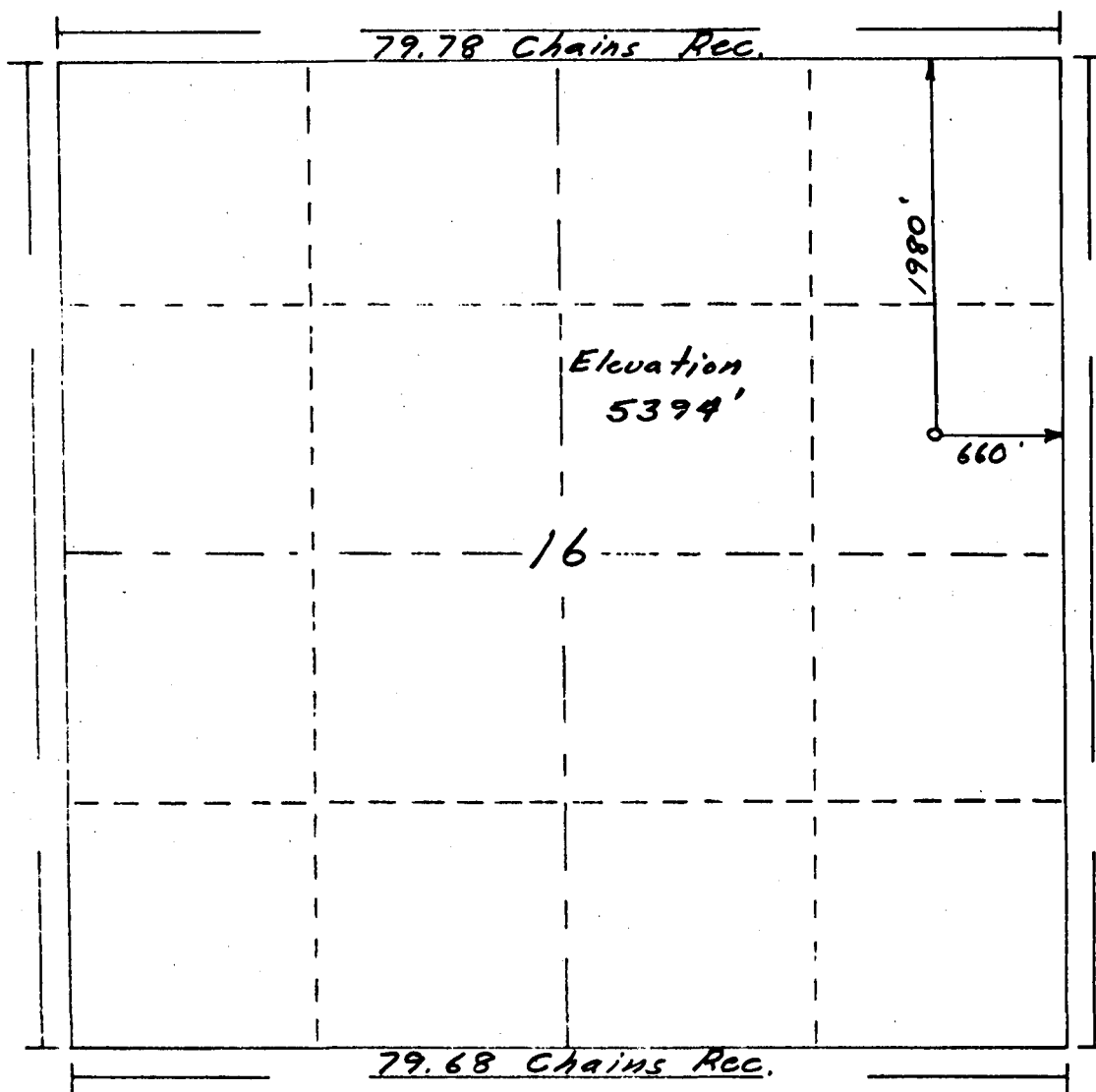
PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:



RECEIVED AUG 22 1980

R. 24E.



Scale... 1" = 1000'

Powers Elevation of Denver, Colorado  
has in accordance with a request from *Kenny Mc Iver*  
for *Columbine Exploration*  
determined the location of *#1 State Grynberg*  
to be *1980' FNL & 660' FEL* Section 16 Township 38 South  
Range 24 East Salt Lake Meridian  
*San Juan County, Utah*

I hereby certify that this plat is an  
accurate representation of a correct  
survey showing the location of  
*#1 State Grynberg*

Date: *19 Aug. '80*

*T. Nelson*  
Licensed Land Surveyor No. 2711  
State of Utah



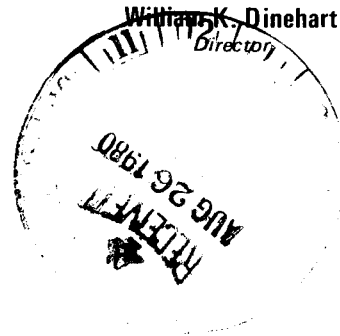
**DIVISION OF STATE LANDS & FORESTRY**  
**DEPARTMENT OF NATURAL RESOURCES**  
ROOM 411 EMPIRE BUILDING  
231 EAST 400 SOUTH  
SALT LAKE CITY, UTAH 84111  
(801) 533-5381

**Scott M. Matheson**  
*Governor*

**Gordon E. Harmston**  
*Executive Director*  
*Dept. of Natural Resources*

**William K. Dinehart**  
*Director*

August 25, 1980



Division of Oil, Gas and Mining  
1588 West North Temple  
Salt Lake City, UT  
84116

Gentlemen:

Enclosed please find a request for approval to drill an Oil and Gas test which was sent to this office by Columbine Exploration Corporation.

I am sure that this request should have been directed to your office.

Yours very truly,

**DONALD G. PRINCE**  
ASSISTANT DIRECTOR

DGP/bp

CC: Columbine Exploration Corporation  
Suite 718 Guaranty Bank Building  
817-17th Street  
Denver, CO 80202

**BOARD MEMBERS**

**Warren C. Haycock** Chairman  
Northern

**Dr. Walter D. Talbot**  
ex-officio

**Jack Sawyers**  
Southwestern

**Hollis Hullinger**  
Eastern Area

**Arden B. Gundersen**  
Forestry & Fire

**Paul S. Rattle**  
Southeastern

**Margaret Bird**  
Central

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. Utah #72162	
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
2. NAME OF OPERATOR Columbine Exploration Corp.		7. UNIT AGREEMENT NAME	
3. ADDRESS OF OPERATOR 817 17th Street, Suite 718, Denver, Colorado 80202		8. FARM OR LEASE NAME State - Grynberg	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface C SE 1/4 NE 1/4 At proposed prod. zone C SE 1/4 NE 1/4 1980 FNL - 660 FEL		9. WELL NO. #1	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 7 mi. North, 2 mi. West of Hatch Trading Post		10. FIELD AND POOL, OR WILDCAT Hatch	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 660' W		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 16, T38S-R24E	
16. NO. OF ACRES IN LEASE 640		12. COUNTY OR PARISH San Juan	
17. NO. OF ACRES ASSIGNED TO THIS WELL 160		13. STATE Utah	
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19. PROPOSED DEPTH 6000' Desert Creek		22. APPROX. DATE WORK WILL START* October 10, 1980	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 5394' GR			

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
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7 7/8"	5 1/2"		6000'	1/4# sack cello flake; 300 sx

We propose to drill a 6000' Desert Creek test, run Dual Induction Lateralog, FDC CNL Caliper. Test all shows of oil or gas, complete using 5 1/2" casing if productive.

APPROVED BY THE DIVISION  
OF OIL, GAS, AND MINING

DATE: 9/5/80  
BY: CB Ferguson

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

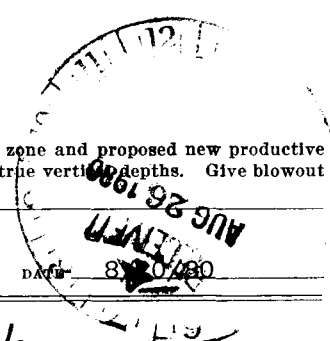
24. SIGNED: [Signature] TITLE: President DATE: 8/30/80

(This space for Federal or State office use)

PERMIT NO. 43-037-30598 APPROVAL DATE 9/5/80

APPROVED BY: TITLE: DATE:

CONDITIONS OF APPROVAL, IF ANY:



## \*\* FILE NOTATIONS \*\*

DATE: Sept. 4, 1980  
 OPERATOR: Columbine Exploration Corp.  
 WELL NO: Dynasty State #1  
 Location: Sec. 16 T. 38S R. 24E County: San Juan  
 File Prepared: ☒ Entered on N.I.D.: ☒  
 Card Indexed: ☒ Completion Sheet: ☒  
 API Number 43-037-30598

CHECKED BY:

Petroleum Engineer: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Director: OK as per rule C-3 provided bond  
filed w/ State Land Board  
 \_\_\_\_\_  
 \_\_\_\_\_

Administrative Aide: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

APPROVAL LETTER:

Bond Required: ☒ Survey Plat Required: ☐  
 Order No. \_\_\_\_\_ O.K. Rule C-3 ☒  
 Rule C-3(c), Topographic Exception - company owns or controls acreage  
 within a 660' radius of proposed site

Lease Designation State Plotted on Map ☒

Approval Letter Written ☒ Wtm

Hot Line ☒

P.I. ☒

#1  
 Contingent  
 upm bond  
 designated

September 11, 1980

Columbine Exploration Corporation  
817 17th Street, Suite 718  
Denver, Colorado 80202

Re: Well No. Grynberg State #1  
Sec. 16, T. 38S, R. 24E.,  
San Juan County, Utah

Insofar as this office is concerned, approval to drill the above referred to oil is hereby granted in accordance with Rule C-3, General Rules and Regulations and Rules of Practice and Procedure. However, said approval is conditional upon the filing of a drilling and plugging bond with with Utah Division of State Lands prior to the spudding of this well.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

MICHAEL T. MINDER - Petroleum Engineer  
Office: 533-5771  
Home: 876-3001

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling. Your cooperation in completing this form will be appreciated.

Further, it is requested that this Division be notified within 24 hours after drilling operations commence, and that the drilling contractor and rig number be identified.

The API number assigned to this well is 43-037-30598.

Sincerely,

DIVISION OF OIL, GAS AND MINING

Cleon B. Feight  
Director

/btm  
cc: Donald Prince



# **Columbine Exploration Corp.**

**COLUMBINE EXPLORATION OPERATING CO.**

**SUITE 718 GUARANTY BANK BLDG. • 817 17TH STREET • DENVER, COLORADO 80202**  
**303/573-9302**

Dear Mike,

Tom asked me to send these logs and the drilling report on the Grynberg well. Hope they will be of help in the disposition of the matter.

Please call if I can be of further help..

Sincerely,

A handwritten signature in cursive script, appearing to read 'MS' or 'Mary Sinnott'.

Mary Sinnott



W 981004-2032 (4)

# RECORDING PRESSURE GAUGE CHART

Ticket No. 981004 Date 1-10-81

Company Columbine Exploration

Lease State Grypberg Well No. #1

## FIELD READINGS

Device No. 5032		24 Hr. Clock No. 7276	
B. T. Gauge Depth 6209 Ft.		Estimated Gauge Depth Temperature 126 °F	
Initial Hydro. Mud Pressure		Thousands of Inch	Pressure P.S.I.
1st	Initial Flow Pressure	2.37	3143
	Final Flow Pressure	.06	80
	First Closed In Pressure	.06	80
	Second Closed In Pressure	.33	438
2nd	Initial Flow Pressure	.06	80
	Final Flow Pressure	.06	80
	First Closed In Pressure	.53	702
	Second Closed In Pressure		
3rd	Initial Flow Pressure		
	Final Flow Pressure		
	First Closed In Pressure		
	Second Closed In Pressure		
Final Hydro. Mud Pressure		2.34	3104

FORM 892-74

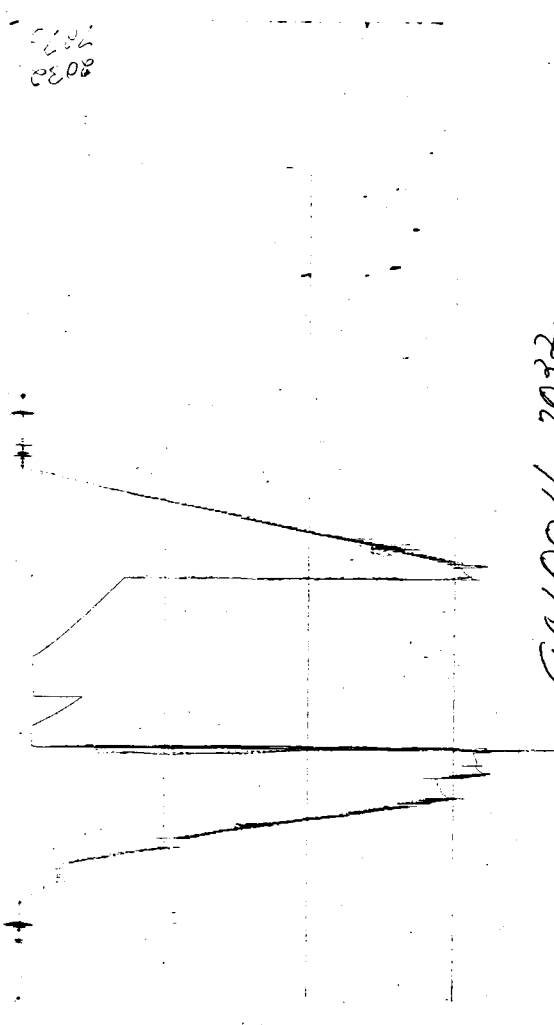
Tester

*Douglas H. Hurrett*

Printed in U.S.A.



Photographic negative for this chart on file three years from date at Halliburton Duncan, Oklahoma 73533



981004-2032

BT  
Clock  
7276 = 24 Hr  
2032

DAILY DRILLING REPORTS

OPERATOR: Columbine Exploration Corp.  
WELL NAME: State Grynberg # 1  
LOCATION: SE $\frac{1}{4}$ NE $\frac{1}{4}$  Sec. 16 T38S-R24E  
COUNTY: San Juan  
STATE: Utah

12/20/80 8 hr. nipple 1st BOP, 4 RUTD rat & mouse holes, 12 drill rat & mouse holes.

12/21/80 Depth 902'. Mud: water. Formation: SN & SH. Bit 1: Smith F2, 7 7/8". Drilled 552' in 19 hr. Jets 14, 14, -. 1000 psi PMP pressure, 65 RPM, 35000# on bit. Run 21 6 1/4" collars, Pump 5 1/2 x 16 x 56 SPM. Time breakdown: 19 Drill, 3 drill mouse hole, 2 PU DC.

12/22/80 Currently WO rotary shaft repair at 1990' Mud: water, Bit 1: Smith F2; 1640' and 32 1/2 hr. cumulative on bit. Survey at 1990': 1 1/2" Same PMP, Collars, weight, etc. Time breakdown: 13 1/2 Drilling, 2 Trip, 1 1/2 pull rotary shaft, 6 3/4 hr. repair, 1/2 rig service.

12/25/80 Drill at 2835' 23 3/4 hr. drilling 1/4 hr. rig service

12/26/80 Drill at 3201' 17 3/4 hr. drilling 3 1/2 hr. trip, 1 1/2 hr. wash and ream, 1 hr. rig repairs, 1/4 hr. rig service. Survey at 3088' 1 1/2".

12/27/80 Drill at 3564' Drilling 23 3/4 hr. Rig service 1/4 hr.

12/28/80 Drill at 3933' 23 hr. drilling, 1/2 hr. Rig service, 1/2 hr. survey. Survey at 3626' 1 1/2".

12/29/80 Drill at 4258' 23 3/4 hr. drilling, 1/4 rig service.

12/30/80 Depth 4585' mud weight 9.1# Viscosity 36 water loss 10.2 Solids 3% Chlorides 400. Formation sand and shale. Bit #2 Size 7 7/8" Smith F3 Ftg. 1497' Total hrs on bit 99 1/2. Jets 1/14 1/15 1/- pump pressure psi 1200 PRM 60 Bit weight 3500 BHA 21 drill collars pump liner size 5 1/2 x 16. SPM 56 23 3/4 hrs. drilling. 1/4 rig service.

12/31/80 Drilling at 4653' WO oil for stuck pipe. Weight 9.1, Viscosity 58, water loss 8, solids 3.5% Chlorides 450. Formation SN x SH. Bit #2 1565' in 104 1/4 hr. Pump pressure 1200 60 RPM 35000#. 5 hr. drilling, 1 3/4 hr. trip, 17 1/4 hr. stuck.

DAILY DRILLING REPORTS (continued)

OPERATOR: Columbine Exploration Corp.  
 WELL NAME: State Grynberg # 1  
 LOCATION: SE $\frac{1}{4}$ NE $\frac{1}{4}$  Sec. 16 T38S-R24E  
 COUNTY: San Juan  
 STATE: Utah

- 1/1/81 Total depth 4653' Mud weight 9.1 Viscosity 58, 2.5 sol., 400 Chlor. Bit #2 Zero footage. Stuck in key seat at 1750'; 22 hrs. WO oil, spot oil, working drill pipe. 2 hrs. Pick up jars.
- 1/2/81 Total depth 4657' Pick up surface jars and jar drill string. String came loose. T $\frac{1}{2}$  with drill string and key seat wiper. Tight hole at 1750' - worked for 12 hrs. TO to change bits. TI and wash/ream to bottom. Drill string consists of 21 6 $\frac{1}{4}$ " collars 598' long and key seat wiper. Pump 5 $\frac{1}{2}$ x16x56, Survey at 4653' 1/4", 1/2 hr. Drl. 5 hr. Trip 5 hr. PU jars and jarring drill string 12 hrs. Work through tight spot, 1 1/2 wash and ream to bottom.
- 1/3 No report - will ask for it on 1/6
- 1/4 No report - will ask for it on 1/6
- 1/5/81 Depth 5644' Mud weight 9.2# Viscosity 40 Water loss 9.2. Solids 3% Chlorides 400 Formation lime and shale. Bit #3 7 7/8" F3 Smith Total cum. hrs. 70 $\frac{1}{4}$ . Total footage 981' Jet size 1/14, 1/15 & 1/- Pump pressure 1200 Rotary RPM 60 Bit weight 35,000# Drill collars 21 6 1/4" Liner size 5 1/2" x 16, Strokes per min. 58 Break down 23 3/4 hr. drilling, 1/4 hr. rig service.
- 1/6/81 Drill at 5838'. Mud 9.4#/gal, 40 viscosity, 10 water loss, 4 solids, 700 Chlorides. Bit # 3 1185' in 93 $\frac{1}{4}$  hr., Jets 1/14, 1/15, 1/-. Pumps: 1200 psi, 60 RPM, 35,000# on bit. 5 $\frac{1}{2}$ "/16"/56SPM. Survey: 5707', 1 $^{\circ}$ . 23 hr. drilling, 1 hr. circulate and survey.
- 1/7/81 Drill at 6167'. Mud weight 9.2#, Viscosity 40, 10 water loss, 4% solids, 200 Chlorides. Limestone and sandstone. Bit #3 7 7/8" F3 1514' in 117 hr. Jets 1/14, 1/15. 1/-. Pumps 1200 psi, 60 RPM, 21 6 1/4", 5 $\frac{1}{2}$ "/16" 56SPM. 23 3/4 hr. drilling, 1/4 hr. rig service.
- 1/8/81 Present Operations: Trip for DST. TD 6186' Mud weight 9.4#, Viscosity 55, Water loss 9.4, solids 4% Chlorides 200. Formation Sandstone and limestone. Bit #3 7 7/8" F3, 1533' & 119 3/4 hr. on bit. Pumps: 1200 psi, 60RPM, 35,000# on bit. 21 6 1/4" collars, 5 1/2"x16x58 SPM. 2 3/4 hr. drilling, 9 trip, 5 1/2 circulate, 5 1/2 RU & log, 3/4 hr. waiting on orders.
- 1/9/81 Present operations: Circulate for samples. Depth 6248' Mud weight 9.5#, Viscosity 55, water loss 2.2, 3% solids, Chlorides 400, formation, limestone and shale. Bit #4 7 7/8" F2 RR 62' 4 1/2 hr. Jets 1/14, 1/15, 1/0. Pump pressure 1200 p.s.i., RPM 60, weight on bit 35,000#. 21 6 1/4" collars, pump liner size 5 $\frac{1}{2}$ x16x56. 4 $\frac{1}{2}$  hr. drilling, 6 $\frac{1}{2}$  trip, 8 $\frac{1}{2}$  WOO, 4 3/4 circulate.

DAILY DRILLING REPORT (Cont.)

OPERATOR: Columbine Exploration Corp.  
WELL NAME: State Grynberg  
LOCATION: SE $\frac{1}{4}$ NE $\frac{1}{4}$  Sec. 16 T38S-R24E  
COUNTY: San Juan  
STATE: Utah

- 1/9/81 Drilling below 6289'. Proposed total depth 6310'. 3' fast drilling break at 6239-42' Hot wire show 55 units. Chromatigraph readings C<sub>1</sub> 400, C<sub>2</sub> 36, C<sub>3</sub> trace. Also at 6249-51' Hot wire show 36, C<sub>1</sub> 220, C<sub>2</sub> 40, C<sub>3</sub> 4, Lithology: Limestone, sandy with anhydrite, light grey, fine crystalline, pinpoint porosity, with dull yellow fluorescence and few pieces with bright blue-white fluorescence. Weak cut. Background readings remain high Hot wire 26, C<sub>1</sub> 110, C<sub>2</sub> 20, C<sub>3</sub> T at 6289'. To log bottom part of hole this p.m. Plan to DST tomorrow.
- 1/11/81 Depth 6316' Mud weight 9.4#, viscosity 42, water loss 10, solids 4.5, Chlorides 600. 17 hr trip, 5 1/4 hr test - DST, 1 3/4 hr. WOO. DST: 6222 - TD. IHP 3143, IF 80, ISI 438, FF 80, FSI 702, FHP 3104, Recover 220' VSGCM. Good test.
- 1/12/81 TD 6316' 3 3/4 hr. trip, 8 3/4 hr. plug and abandon, 1 1/2 hr. Circulate, 5 hr. laying down drill pipe, 5 hr. nipping down. BOP.
- 1/13/81 RDRT.
- 1/13/81 DST: 6222 - TD. IHP 3143', IF 80, ISI 438, FF 80, FSI 702, FHP 3104, Recover 220' VSGCM. Good test.



# BJ-HUGHES Inc.

## SERVICE AND EQUIPMENT REPORT

TICKET NO. 5-30880 STATION FARMington 01-36051 DATE 01-11-81

COMPANY Columbine Exp. Corp. LOCATION #1, ERYNBURG

UNIT NOS. 1416-P 5377-B 6157-P4

LOG NO. \_\_\_\_\_ JOB OPERATING TIME \_\_\_\_\_ ACCUMULATED TIME \_\_\_\_\_

On this job indicate by entering Unit Number where the equipment did not operate satisfactorily or a deficiency occurred.

1. Engines	11. Mixer Performance	21. Steel Lines
2. Cooling System	12. Plug Valves	22. Recorders
3. Starters	13. Bulk Equipment	23. Hoses
4. Clutches	14. Mixing Pump	24. Safety Practices
5. P. T. O.	15. Blowers	25. Desired Injection Rate
6. Drive Lines	16. Cement Heads	26. All Equipment on Time
7. Pumps	17. Cement Plugs	27. Electric Wiring
8. Slurry Supercharger	18. Barrel Counters	28. Clean Location
9. Hydraulics	19. Mixing Manifold	29. Correct Instructions
10. Air System	20. Desired Slurry Weight	30. Other
31. Did Rig Crew Use Equipment During Absence of BJ Employee <u>NO</u>		32. Corrosion Failure

Give further details on all items checked above. Use reverse side if necessary.

Remedial Action:

### IN YOUR OPINION INDICATE:

Degree of Customer Satisfaction	<input type="checkbox"/> Excellent	Overall Performance of Job	<input type="checkbox"/> Excellent	Equipment Appearance Upon Arrival Upon Departure (1)	<input type="checkbox"/> Excellent
	<input checked="" type="checkbox"/> Very Good		<input checked="" type="checkbox"/> Very Good		<input checked="" type="checkbox"/> Very Good
	<input type="checkbox"/> Good		<input type="checkbox"/> Good		<input type="checkbox"/> Good
	<input type="checkbox"/> Fair		<input type="checkbox"/> Fair		<input type="checkbox"/> Fair
	<input type="checkbox"/> Poor		<input type="checkbox"/> Poor		<input type="checkbox"/> Poor

Did you ask for next job? yes

How did you improve BJ's image with this job? Good work

(1) Use Arrow To Indicate Appearance Upon Arrival and Upon Departure

Signed Tommy Thompson  
BJ Representative

# PUMPING SERVICES JOB ORDER

Date \_\_\_\_\_ Time \_\_\_\_\_ A.M. P.M. By \_\_\_\_\_  
Company Calumet & Hecla Corp  
Person Calling Tom Mc Carthy Phone 303-  
Field \_\_\_\_\_ Well Name & No. \_\_\_\_\_  
Size & Wt. of Pipe; Thread Specs. 4" x hole  
Time to Be Hooked Up \_\_\_\_\_

## CEMENTING SERVICE

Type Job P+A No. Trucks \_\_\_\_\_  
No. & Type Top Plugs \_\_\_\_\_  
No. & Type Bottom Plugs \_\_\_\_\_  
No. Sax #5 Sax C B C  
Brand \_\_\_\_\_  
Type \_\_\_\_\_  
Treat \_\_\_\_\_ Sax with \_\_\_\_\_ % of \_\_\_\_\_ by weight.

## ACID SERVICE

No. Gallons \_\_\_\_\_ Acid Type \_\_\_\_\_  
% Acid \_\_\_\_\_ BHT in °F \_\_\_\_\_  
Special Instructions \_\_\_\_\_

## FRACTURING SERVICE

Type Job \_\_\_\_\_ No. Pumps \_\_\_\_\_  
Amount & Type Fluid \_\_\_\_\_  
Amount & Size Sand \_\_\_\_\_  
Auxiliary Equipment \_\_\_\_\_  
Special Instructions \_\_\_\_\_

## OTHER PUMPING SERVICES

Type Job \_\_\_\_\_ BHT in °F \_\_\_\_\_  
Amount & Type Materials \_\_\_\_\_  
Special Instructions \_\_\_\_\_  
Service Units on Job Wester Rig #20 Time Out \_\_\_\_\_  
Personnel on Job \_\_\_\_\_  
Remarks: \_\_\_\_\_

plugs to be set at , Sav at 6250

210 Sav at 4950

35 Sav at 3600

45 Sav 1900

55 Sav 1300

430 Sav at 360<sup>ft</sup>

~~remainder of surface~~  
2100x Surface plug

be on Location in 6007 hrs

TD: 6316'

4" 1440<sup>ft</sup>

P.A.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE\*

(See other instructions on reverse side)

Form approved.  
Budget Bureau No. 42-R355.5.

8

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1a. TYPE OF WELL: OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input checked="" type="checkbox"/> Other <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO.	
b. TYPE OF COMPLETION: NEW WELL <input type="checkbox"/> WORK OVER <input type="checkbox"/> DEEP-EN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> Other <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
2. NAME OF OPERATOR Columbine Exploration Corp., 303-573-9302		7. UNIT AGREEMENT NAME	
3. ADDRESS OF OPERATOR 817 17th Street, Ste. 718, Denver, Colorado 80202		8. FARM OR LEASE NAME State Grynberg	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 1980' FNL & 660' FEL At top prod. interval reported below At total depth		9. WELL NO. 1	
14. PERMIT NO. 43-037-30598		DATE ISSUED 9/5/80	
15. DATE SPUDDED 12/21/80		16. DATE T.D. REACHED 1/10/81	
17. DATE COMPL. (Ready to prod.) 1-12-81		18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 5404' KB	
19. ELEV. CASINGHEAD		20. COUNTY OR PARISH San Juan	
21. STATE Utah		22. FIELD AND POOL, OR WILDCAT Hatch	
23. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA Sec. 16, T38S, R24E		24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* None	
25. TYPE ELECTRIC AND OTHER LOGS RUN DIL FDL - CNL		26. WAS WELL CORED	
27. CASING RECORD (Report all strings set in well)			
CASINO SIZE 8 5/8"	WEIGHT, LB./FT. 24	DEPTH SET (MD) 300'	HOLE SIZE 12 1/4"
CEMENTING RECORD 225 sacks		AMOUNT PULLED	
Plugged as follows: Spotted 10SXS. Class B cement at 6250'; spotted 10 SXS at 4950' spotted 5 SXS at 3600'; spotted 5 SXS at 1900'; spotted 5 SXS at 1300', spotted 30 SXS at 360', spot at surface and erect marker.			
28. LINER RECORD			
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*
29. TUBING RECORD			
SIZE	DEPTH SET (MD)	PACKER SET (MD)	
30. PERFORATION RECORD (Interval, size and number)			
31. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.			
DEPTH INTERVAL (MD)		AMOUNT AND KIND OF MATERIAL USED	
32. PRODUCTION			
DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	
WELL STATUS (Producing or shut-in) D X A		DATE OF TEST	
HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.
GAS—MCF.	WATER—BBL.	GAS-OIL RATIO	
FLOW. TUBING PRESS.	CASINO PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.
GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
33. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)			
TEST WITNESSED BY			
34. LIST OF ATTACHMENTS Logs will be sent when available.			
35. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records			
SIGNED <i>Tom McElroy</i>		TITLE Petroleum Engineer	
DATE 1/13/81			

\*(See Instructions and Spaces for Additional Data on Reverse Side)



# INSTRUCTIONS

**General:** This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

**Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

**Item 18:** Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. **Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

**Item 29:** "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool. **Item 33:** Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

## 37. SUMMARY OF POROUS ZONES:

SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Lower Desert Creek	6,238'	6,254'	DST from 6222'- TD, recovered 220' VSGCM, FSI 759#, Tite,

## 38. GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH
Chinle	2075'	Same
Cutler	2957'	
Hermosa	4960'	
Paradox	5560'	
Ismay	5940'	
Desert Creek	6182'	
Lower Desert Creek	6238'	
Akah	6279'	

FILE IN TRIPLICATE  
FORM OGC-8-X

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING  
1588 West North Temple  
Salt Lake City, Utah 84116

RECEIVED

DIVISION OF  
OIL, GAS & MINING

\*REPORT OF WATER ENCOUNTERED DURING DRILLING\*

Well Name & Number State Grynberg # 1  
Operator Columbine Exploration Corp. Address 817 17th Street, Ste. 718  
Contractor Cactus Drilling Address Farmington, New Mexico  
Location SE 1/4 NE 1/4 Sec. 16 T. 38S R. 24E County San Juan

Water Sands

<u>Depth</u>		<u>Volume</u>	<u>Quality</u>
From	To	Flow Rate or Head	Fresh or Salty
1. <u>No flows reported</u>			
2. _____			
3. _____			
4. _____			
5. _____			

(Continue of reverse side if necessary)

Formation Tops

Refer to completion report.

Remarks

- NOTE: (a) Report on this form as provided for in Rule C-20, General Rules and Regulations and Rules of Practice and Procedure.
- (b) If a water analysis has been made of the above reported zone, please forward a copy along with this form.

(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

LEASE DRYNDING FID		WELL NO. 1		API WELL NUMBER		DAT 1-11-52					
OPERATOR Cactus Drilling Co				CONTRACTOR Cactus Drilling Co		RIG 26					
SIGNATURE OF OPERATOR'S REPRESENTATIVE				SIGNATURE OF CONTRACTOR'S TOOL PUSHER							
D.P. SIZE	WT./FT.	GRADE	TOOL JT Q.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STRC LENG		
TIME DISTRIBUTION - HOURS				NO. DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD			
CODE NO. - OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	SIZE	TIME	WEIGHT		
1. RIG UP AND TEAR DOWN				STB RMR OD	FT.	MFG.		PRESSURE GRADIENT			
2. DRILL ACTUAL				D.C. ID OD	FT.	TYPE		VISC.-SEC.			
3. REAMING				STB RMR OD	FT.	JETS 1/32"		PV/YP			
4. CORING				D.C. ID OD	FT.	SER. NO.		GELS			
5. CONDITION MUD & CIRCULATE				STB RMR OD	FT.	DEPTH OUT		WL.-CC'S			
6. TRIPS						DEPTH IN		pH			
7. LUBRICATE RIG						TOTAL FTG.		SOLIDS %			
8. REPAIR RIG						TOTAL HRS. RUN					
9. CUT OFF DRILLING LINE				STANDS DP	FT.	COND. 1/8" T/B/ GAGE		MUD & CHEMICALS ADDED			
10. DEVIATION SURVEY				SINGLES DP	FT.	GPM/ PD-PSI		TYPE	AMT.		
11. WIRE LINE LOGS				KELLY DOWN	FT.						
12. RUN CASING & CEMENT				TOTAL	FT.						
13. WAIT ON CEMENT				WT. OF STRING	LBS.	FUEL					
14. NIPPLE UP B.O.P.				NO. DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD			
15. TEST B.O.P.				BIT	FT.	BIT NO.	SIZE	TIME	WEIGHT		
16. DRILL STEM TEST				STB RMR OD	FT.	MFG.		PRESSURE GRADIENT			
17. PLUG BACK				D.C. ID OD	FT.	TYPE		VISC.-SEC.			
18. SQUEEZE CEMENT				STB RMR OD	FT.	JETS 1/32"		PV/YP			
19. FISHING				D.C. ID OD	FT.	SER. NO.		GELS			
20. DIR. WORK				STB RMR OD	FT.	DEPTH OUT		WL.-CC'S			
21.						DEPTH IN		pH			
22.						TOTAL FTG.		SOLIDS %			
23.						TOTAL HRS. RUN					
COMPLETION A. PERF'R'TN B. TBC TRIPS C. TREATING D. SWABBING E. TESTING F. ADDIT'N'L G.				STANDS DP	FT.	COND. 1/8" T/B/ GAGE		MUD & CHEMICALS ADDED			
				SINGLES DP	FT.	GPM/ PD-PSI		TYPE	AMT.	TYPE	AMT.
				KELLY DOWN	FT.						
				TOTAL	FT.						
				WT. OF STRING	LBS.	FUEL					
				NO. DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD			
				BIT	FT.	BIT NO.	SIZE	TIME	WEIGHT		
STB RMR OD	FT.	MFG.		PRESSURE GRADIENT							
D.C. ID OD	FT.	TYPE		VISC.-SEC.							
STB RMR OD	FT.	JETS 1/32"		PV/YP							
D.C. ID OD	FT.	SER. NO.		GELS							
STB RMR OD	FT.	DEPTH OUT		WL.-CC'S							
		DEPTH IN		pH							
		TOTAL FTG.		SOLIDS %							
		TOTAL HRS. RUN									
STANDS DP	FT.	COND. 1/8" T/B/ GAGE		MUD & CHEMICALS ADDED							
SINGLES DP	FT.	GPM/ PD-PSI		TYPE	AMT.	TYPE	AMT.				
KELLY DOWN	FT.										
TOTAL	FT.										
WT. OF STRING	LBS.	FUEL									
TOTALS				NO. DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD			
DAY WORK TIME SUMMARY (OFFICE USE ONLY)				BIT	FT.	BIT NO.	SIZE	TIME	WEIGHT		
HRS. W/CONTR. D.P.				STB RMR OD	FT.	MFG.		PRESSURE GRADIENT			
HRS. W/OPR. D.P.				D.C. ID OD	FT.	TYPE		VISC.-SEC.			
HRS. WO/D.P.				STB RMR OD	FT.	JETS 1/32"		PV/YP			
HRS. STANDBY				D.C. ID OD	FT.	SER. NO.		GELS			
				STB RMR OD	FT.	DEPTH OUT		WL.-CC'S			
						DEPTH IN		pH			
						TOTAL FTG.		SOLIDS %			
						TOTAL HRS. RUN					
TOTAL DAY WORK				STANDS DP	FT.	COND. 1/8" T/B/ GAGE		MUD & CHEMICALS ADDED			
				SINGLES DP	FT.	GPM/ PD-PSI		TYPE	AMT.		
				KELLY DOWN	FT.						
				TOTAL	FT.						
NO. OF DAYS FROM SPUD				WT. OF STRING	LBS.	FUEL					
CUMULATIVE ROTATING HRS.											
TOTAL MUD COST											





		NO. LINES		FT. SLIPPED		
FF		PRESENT LENGTH				
TRIPS CUT						
VE TRIPS						
ON IT DO	PUMP PRESS	PUMP NO.		PUMP NO.		METHOD RUN  SOL S P R L P C O M B I N E D
		LINER SIZE	S.P.M.	LINER SIZE	S.P.M.	
I	DEPTH		DEV.		DIRECTION	

is going to make ~~himself~~

ON IT		PUMP PRESS	PUMP NO.		PUMP NO.		METHOD RUN
			LINER SIZE	S. P. M.	LINER SIZE	S. P. M.	NO. OF PUMP CONTACT
1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9
10	10	10	10	10	10	10	10
11	11	11	11	11	11	11	11
12	12	12	12	12	12	12	12
13	13	13	13	13	13	13	13
14	14	14	14	14	14	14	14
15	15	15	15	15	15	15	15
16	16	16	16	16	16	16	16
17	17	17	17	17	17	17	17
18	18	18	18	18	18	18	18
19	19	19	19	19	19	19	19
20	20	20	20	20	20	20	20
21	21	21	21	21	21	21	21
22	22	22	22	22	22	22	22
23	23	23	23	23	23	23	23
24	24	24	24	24	24	24	24
25	25	25	25	25	25	25	25
26	26	26	26	26	26	26	26
27	27	27	27	27	27	27	27
28	28	28	28	28	28	28	28
29	29	29	29	29	29	29	29
30	30	30	30	30	30	30	30
31	31	31	31	31	31	31	31
32	32	32	32	32	32	32	32
33	33	33	33	33	33	33	33
34	34	34	34	34	34	34	34
35	35	35	35	35	35	35	35
36	36	36	36	36	36	36	36
37	37	37	37	37	37	37	37
38	38	38	38	38	38	38	38
39	39	39	39	39	39	39	39
40	40	40	40	40	40	40	40
41	41	41	41	41	41	41	41
42	42	42	42	42	42	42	42
43	43	43	43	43	43	43	43
44	44	44	44	44	44	44	44
45	45	45	45	45	45	45	45
46	46	46	46	46	46	46	46
47	47	47	47	47	47	47	47
48	48	48	48	48	48	48	48
49	49	49	49	49	49	49	49
50	50	50	50	50	50	50	50
51	51	51	51	51	51	51	51
52	52	52	52	52	52	52	52
53	53	53	53	53	53	53	53
54	54	54	54	54	54	54	54
55	55	55	55	55	55	55	55
56	56	56	56	56	56	56	56
57	57	57	57	57	57</		

$$\begin{array}{r} 12 \\ 30 \\ \hline 2 \\ 120 \end{array}$$
[illegible]

~~DRILL TYPE~~

~~Ld W-100 AID~~

A.M.

DOLLER Dr. D. R. Kinslow

**№ 8454**

DATE 1-11-81 -

WELL NAME & NO. FARNBURG FED 1 No 8454

COMPANY Columbian Exp Corp

TOOL PUSHER Lee R. Barlow RIG NO. 20

MORNING TOUR 11 P.M. 7 A.M.

CREW	SOC. SEC. NO.	NAME	MRS.
DRILLER <u>225</u>	<u>30 4312</u>	<u>L. H. Hinkle</u>	<u>8</u>
DRKMAN <u>501</u>	<u>52 1505</u>	<u>R. F. Pladson</u>	<u>8</u>
MTRMAN <u>527-24</u>	<u>42025</u>	<u>E. Foster</u>	<u>8</u>
FLRMAN <u>1041145</u>		<u>Wayne Hinkle</u>	<u>8</u>
FLRMAN			

INJURY REPORT N. Dec

NO. OF DAYS \_\_\_\_\_ SINCE LAST LOST TIME ACCIDENT

DAY TOUR						<u>7:00</u>		A.M.		<u>2:00</u>		P.M.	
CREW	SOC. SEC. NO.			NAME	HRS.								
DRILLER	557	969	298	EL STONIER	12	14	03						
DRKMAN	521	929	869	JAY CORNIER	12	11	25						
MTRMAN	573	116	099	FC STONIER	12	10	45						
FLRMAN	523	044	982	WA CORNIER	12	10	10						
FLRMAN													

INJURY REPORT *N/A*

*DEPT 100 M.* NO. OF DAYS \_\_\_\_\_ SINCE LAST LOST TIME ACCIDENT

EVENING TOUR				P.M.		P.M.	
CREW	SOC. SEC. NO.			NAME	HRS.		
DRILLER	461	52	1725	A. J. PEARL SHAW	8	14	05
DRKMAN	770	34	7194	R. L. CAILLARD	4	11	25
MTRMAN	532	56	9620	GERALD GONZALES	8	18	45
FLRMAN	585	E	7174	W. H. L. ALLEN	8	10	10
FLRMAN							

**INJURY REPORT** N/A

NO. OF DAYS \_\_\_\_\_ SINCE LAST LOST TIME ACCIDENT

Drove 200 miles

**INSTRUCTIONS: List all Delivery Tickets — List welding time. "Pusher" must sign and approve all charges. Price each item and welding cost.**

[illegible]

**DETACH AND MAIL ALL COPIES TO  
CACTUS DRILLING**

February 13, 1981

Columbine Exploration Corp.  
817 17th Street  
Suite 718  
Denver, Colorado 80202

RE: Well No. Grynberg State #1  
Sec. 16, T. 38S, R. 24E.,  
San Juan County, Utah

Gentlemen:

According to our records, a "Well Completion Report" filed with this office January 13, 1981, from above referred to well indicates the following electric logs were run: DIL, FDL-CNL logs. As of today's date this office has not received the FDL-CNL logs.

Rule C-5, General Rules and Regulations and Rules of Practice and Procedure, requires that a well log shall be filed with the Commission together with a copy of the electric and radioactivity logs.

Your prompt attention to the above will be greatly appreciated.

Sincerely,

DIVISION OF OIL, GAS, AND MINING

BARBARA HILL  
WELL RECORDS

/bjh

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING

## SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

<b>1. OIL WELL</b> <input type="checkbox"/> <b>GAS WELL</b> <input type="checkbox"/> <b>OTHER</b> <input type="checkbox"/>		<b>5. LEASE DESIGNATION AND SERIAL NO.</b>
<b>2. NAME OF OPERATOR</b> Columbine Exploration Corp.		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME</b>
<b>3. ADDRESS OF OPERATOR</b> 817 17th Street, Ste. 718, Denver, CO 80202		<b>7. UNIT AGREEMENT NAME</b>
<b>4. LOCATION OF WELL</b> (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface  1980' FNL & 660' FEL		<b>8. FARM OR LEASE NAME</b> State Grynberg
<b>14. PERMIT NO.</b>		<b>9. WELL NO.</b> 1
<b>15. ELEVATIONS</b> (Show whether DF, RT, OR, etc.) 5404 KB		<b>10. FIELD AND POOL, OR WILDCAT</b> Hatch
		<b>11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA</b> Sec. 16, T38S, R24E
		<b>12. COUNTY OR PARISH</b> San Juan
		<b>13. STATE</b> UT

16.

### Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

#### NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

☐  
☐  
☐  
☐

PULL OR ALTER CASING

☐  
☐  
☐  
☐

FRACTURE TREAT

MULTIPLE COMPLETE

SHOOT OR ACIDIZE

ABANDON\*

REPAIR WELL

CHANGE PLANS

(Other)

#### SUBSEQUENT REPORT OF:

WATER SHUT-OFF

☐  
☐  
☐

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT\*

☐  
☐  
☒

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

**17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS** (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

4/24/81: Location graded and cleaned up. The well completion report for this well has already been filed.

**18. I hereby certify that the foregoing is true and correct**

SIGNED



TITLE

Petroleum Engineer

DATE

April 29, 1981

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:





# Columbine Exploration Corp.

COLUMBINE EXPLORATION OPERATING CO.

SUITE 718 GUARANTY BANK BLDG. • 817 17TH STREET • DENVER, COLORADO 80202  
303/573-9302

RECEIVED  
JUL 23 1981

July 21, 1981

DIVISION OF  
Division of Oil, Gas & Mining OIL, GAS & MINING  
1588 West, North Temple  
Salt Lake City, Utah 84116

Re: Bond S 147F008A - \$5,000 Bond of Lessee  
State of Utah, No. 1 State Grynberg

Gentlemen:

Enclsoed you will find copies of the Well Completion Report dated 1/31/81 and of the Sundry Notices and Reports on Wells dated 4/29/81, as well as the various logs run on the above captioned well.

Please note that the well has been ready for inspection since the end of April. As of this date we have not received the approval or indication that the site has been inspected.

If the enclosed meets with your approval, please release our Owners Surety Bond \$147F008A in the amount of \$5,000.

Thank you,

Sincerely,

COLUMBINE EXPLORATION CORP.

*Mary Sinnott*  
Mary Sinnott

/ms

enc.

cc: Bayly, Martin and Fay, Inc.

APPROVED BY THE STATE  
OF UTAH DIVISION OF  
OIL, GAS AND MINING  
DATE: \_\_\_\_\_  
BY: \_\_\_\_\_

DIVISION OF OIL, GAS AND MINING

PLUGGING PROGRAM

Tom McCarthy 303-573-9302

NAME OF COMPANY: Columbine Exploration Corp.

WELL NAME: Grynberg St. #1

SECTION 16 TOWNSHIP 38S RANGE 24E COUNTY San Juan

VERBAL APPROVAL GIVEN TO PLUG AND ABOVE REFERRED TO WELL IN THE FOLLOWING MANNER:

TOTAL DEPTH: 6316'

CASING PROGRAM:

8 5/8", 24# @ 300' cement to surface  
7 7/8" openhole

FORMATION TOPS:

Navajo	1300'
Chinle	2075'
Cutler	2957'
Hermosa	4960'
Pariaoloy	5560'
Ismay	5940'
U. Desert	
Creek	6182'
L. Desert	
Creek	6238'
Akiah	6279

PLUGS SET AS FOLLOWS:

1) 6200' - 5900'

No cores or water encountered

2) 5450' - 5250

DST:

3) 3600' - 3400'

1) 6238'-54' (220' VSGCM)

4) 2800' - 2600"

Place 9.5#, 50 vis. fresh water gel based abandonment mud between plugs; erect regulation dryhole marker; clean up and restore site; notify Division when prepared for inspection.

5) 1200" - 1000'

6) 350' - 250'

7) 50' - surface

DATE 8-3-81

SIGNED MTM

*W. L. Menden*

cc: Columbine, T. McCarthy  
State Lands, Donald G. Prince

SCOTT M. MATHESON  
Governor

TEMPLE A. REYNOLDS  
Executive Director,  
NATURAL RESOURCES

CLEON B. FEIGHT  
Director



STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING  
1588 West North Temple  
Salt Lake City, Utah 84116  
(801) 533-5771

OIL, GAS, AND MINING BOARD

CHARLES R. HENDERSON  
Chairman

JOHN L. BELL  
EDWARD T. BECK  
E. STEELE MCINTYRE  
BOB NORMAN  
MARGARET BIRD  
HERM OLSEN

September 1, 1981

Mary Sinnott  
Columbia Exploration Corp.  
Guaranty Bank Building-Suite 718  
817 17th Street  
Denver, CO 80202

Re: No. 1 State Grynberg

Dear Ms. Sinnott:

I am in receipt of your letter dated July 21, 1981 wherein you indicate that the aforesaid well has been plugged and is now ready for inspection. You also request release of your Owners Surety Bond \$147F008A.

At this time, the State Division of Oil, Gas and Mining will not recommend or approve release of Columbine Exploration Corporation's Five Thousand Dollar (\$5,000) surety bond.

Examination of pertinent records on file with the Division of Oil, Gas and Mining indicate that Columbine Exploration Corporation, in plugging said well, is in violation of the Oil and Gas Conservation Act, UCA 1953, 40-6-1 and the rules promulgated thereunder, specifically Rule D-1.

Prior to plugging the aforesaid well, Columbine Exploration Corporation neither notified this Division of its intent to plug said well nor did it receive written approval of its plugging plan.

Mike Minder and I have thoroughly reviewed the plugging program delineated in the submitted Well Completion or Recompletion Report and Log. Our initial conclusion is that said plugging program is inadequate. However, we are willing to vacate this tentative conclusion after examination of the well records and logs. Therefore, at your earliest convenience please submit the requested supplemental documentation.

Mary Sinnott  
September 1, 1981  
Page 2

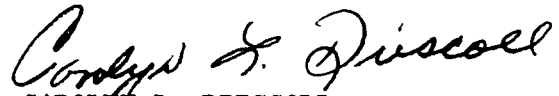
Also, be advised that if the technical staff of the Division of Oil, Gas and Mining makes a final determination that the aforesaid well is improperly plugged the Division shall require that said defects be remedied by replugging this well in a manner approved by the State.

Understandably, until the Division of Oil, Gas and Mining is satisfied that this well is properly plugged and inspected we can take no action to release your surety bond.

Lastly, to avoid future problems of this nature I would strongly urge that Columbine Exploration Corporation be more diligent in adhering to the statute and the regulations by which the Division of Oil, Gas and Mining is bound.

If you have any questions, please do not hesitate to contact me.

Sincerely,

  
CAROLYN L. DRISCOLL  
SPECIAL ASSISTANT  
ATTORNEY GENERAL

CLD/rb



# Columbine Exploration Corp.

COLUMBINE EXPLORATION OPERATING CO.

SUITE 718 GUARANTY BANK BLDG. • 817 17TH STREET • DENVER, COLORADO 80202  
303/573-9302

RECEIVED  
SEP 14 1981

September 11, 1981

DIVISION OF  
OIL, GAS & MINING

Mike Minder  
Division of Oil, Gas & Mining  
1588 West, North Temple  
Salt Lake City, Utah 84116

Re: State Grynberg No. 1  
San Juan County, Utah

Dear Mike:

Refer to our recent telephone conversation. Attached is the cementing documentation available to us. I hope you have received the other information that you had requested by now.

Please call if you have any further questions.

Sincerely,

COLUMBINE EXPLORATION CORP.

Tom McCarthy  
Petroleum Engineer

TM/pm  
enc.



**BJ-HUGHES Inc.**

A SUBSIDIARY OF HUGHES COMPANY

**HUGHES**

P.O. BOX 2250, LONG BEACH, CALIFORNIA 90801

**BULK MATERIAL CONTRACT**TERMS: PAYABLE AT LONG BEACH, CALIFORNIA  
N. PROX. STATEMENT ON REQUEST ONLY

DATE OF JOB <u>11-11-81</u>		DISTRICT <u>1</u>	DIST. NO. <u>1</u>	DATE <u>11-11-81</u>	NO. <u>B 28691</u>
CUSTOMER <u>1</u>		WELL NO. <u>41</u>		NEW WELL <input checked="" type="checkbox"/> OLD WELL <input type="checkbox"/>	CUSTOMER ORDER NO.
ADDRESS		COUNTY/PARISH <u>San Juan</u>		LEASE <u>SPM Corp</u>	
CITY		STATE		ZIP	
AUTHORIZED BY		FIELD NAME		WELL OWNER <u>SPM Corp</u>	
CUSTOMER ACCOUNT NO.		OFFICE USE ONLY		SERVICE TICKET NO. <u>S</u>	
<b>DISTRICT COPY</b>		STATE		CODE	
		COUNTY/PARISH		TAXABLE YES <input type="checkbox"/> NO <input type="checkbox"/>	
		SALESMAN NUMBER <u>1111</u>		CITY	
TRUCK & TRAILER NUMBER <u>1</u>		NO. OF LOADS <u>1</u>		OTHER EQUIPMENT NO. <u>1416-P</u>	
TRUCK & TRAILER NUMBER		NO. OF LOADS		NO. OF MILES FROM STATION TO WELL	
TRUCK & TRAILER NUMBER		NO. OF LOADS		TOTAL PIECES OF BJ EQUIPMENT USED <u>3</u>	
TRUCK & TRAILER NUMBER		NO. OF LOADS		<u>136</u>	

**CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered)**

The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of BJ-HUGHES Inc.

PRICE BOOK	PRICE BOOK REF. NO.	BRAND & TYPE	QUANTITIES				UNIT PRICE	U/M	PRICE EXTENSION
			ORDERED	USED	RETURNED	CHARGED			
MATERIALS									
SERVICES		BENTONITE % GEL IN. SACKS: CEMENT							
		MIXING SERVICE							
		RETURNED MATERIAL CHARGE							
		WAITING TIME							
	MILEAGE CHARGE	TONS <u>3.5</u>	MILES <u>136</u>						
									<b>874.50</b>
SERVICE REPRESENTATIVE <u>[Signature]</u>		THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: <u>[Signature]</u>							

(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

☐ CHECK IF CONTINUATION IS USED

to review and correction by our Accounting Department.

# B. J. Hughes, Inc.

## Cementing Service Report

Farmington, New Mexico

Date 01-11-81

Company Columbine Exp. Corp.

Well No. #1, ERYNBURG

Formation \_\_\_\_\_

County SAN JUAN

State UTAH

BJ Service Foreman Jimmy Thompson

Company Representative Tom McCarthy

REMARKS: Plug Job

1st @ 6250'

2nd @ 4950'

### WELL DATA

Hole Size: 6 1/4" Depth: 6316'

Casing Size: 4" Wt. 14 Depth 6316'

Dlg. Fluid Type mud Wt. 9.1

Stage Collars: \_\_\_\_\_

Contractor: CACTUS Drilling #20

### CEMENT DATA

NO. SACKS	YIELD Cu. Ft./Sx.	CEMENT MIX	VOLUME BBLs.	W
75	1.171	"B" NEAT	15.6	15.

Volume of Displacement 1st 67.5 Bbl

Cement Circulated 2nd 53.4 Bbls

Circulation During Job? yes

Trucks Used 1416-P 5377-B 6157-P4

TIME	RATE BPM	VOLUME BBL	PRESSURE		Job Detail
			TUBING	CASING	
9:23	2	5	500	500	Held safety meeting
9:26	2		500	500	Start H <sub>2</sub> O Ahead
9:28	2	2	500	500	Start Slurry
9:27	2	3	500	500	End
9:29	4		500	500	Fresh H <sub>2</sub> O pad
9:45	4	67.5	500	500	Start mud
					End
					1st Plug complete ✓
11:22	2	5	450	450	Start H <sub>2</sub> O Ahead
11:25	2		450	450	Start Slurry
11:26	2	2	450	450	End
11:26	2	3	450	450	Fresh H <sub>2</sub> O pad
11:27	4		450	450	Start mud
11:40	4	53.4	450	450	End
					2nd Plug complete



# B. J. Hughes, Inc.

## Cementing Service Report

Farmington, New Mexico

Date 01-11-81  
 Company Columbine Exp. Corp.  
 Well No. #1, ERYNBURG  
 Formation \_\_\_\_\_  
 County SAN JUAN

State UTAH  
 BJ Service Foreman Terrence Thompson  
 Company Representative \_\_\_\_\_

REMARKS: Plug Job  
3rd @ 3600'  
4th @ 1900'

### WELL DATA

Hole Size: 6 1/4" Depth: 6316'  
 Casing Size: 4" Wt. 14 Depth 6316'  
 Dlg. Fluid Type mud Wt. 9.1  
 Stage Collars: \_\_\_\_\_  
 Contractor: CACTUS DRILLING CO. RIG #20

### CEMENT DATA

NO. SACKS	YIELD Cu. Ft./Sk.	CEMENT MIX	VOLUME BBLs.	Wt.
<u>25</u>	<u>1.171</u>	<u>IDEAL CLASS "B"</u>	<u>15.6</u>	<u>15</u>

Volume of Displacement 3rd 38.8 Bbl  
 Cement Circulated 4th 20.5 Bbls  
 Circulation During Job? yes

Trucks Used 1416-P 5373-B 6157-P4

TIME	RATE BPM	VOLUME BBL	PRESSURE		Job Detail
			TUBING	CASING	
<u>12:42</u>	<u>2</u>	<u>3</u>	<u>600</u>		<u>Start H<sub>2</sub>O Ahead</u>
<u>12:44</u>	<u>2</u>		<u>600</u>		<u>Start SLURRY</u>
<u>12:45</u>	<u>2</u>	<u>1</u>	<u>600</u>		<u>End</u>
<u>12:45</u>	<u>2</u>	<u>2</u>	<u>600</u>		<u>Fresh H<sub>2</sub>O PAD</u>
<u>12:46</u>	<u>4</u>		<u>600</u>		<u>Start mud</u>
<u>12:55</u>	<u>4</u>	<u>38.8</u>	<u>600</u>		<u>End</u>
					<u>3rd Plug Complete</u>
<u>2:23</u>	<u>2</u>	<u>3</u>	<u>350</u>		<u>Start H<sub>2</sub>O Ahead</u>
<u>2:24</u>	<u>2</u>		<u>350</u>		<u>Start slurry</u>
<u>2:25</u>	<u>2</u>	<u>1</u>	<u>350</u>		<u>End</u>
<u>2:25</u>	<u>2</u>	<u>2</u>	<u>350</u>		<u>Fresh H<sub>2</sub>O PAD</u>
<u>2:26</u>	<u>4</u>		<u>350</u>		<u>Start mud</u>
<u>2:30</u>	<u>4</u>	<u>20.5</u>	<u>350</u>		<u>End</u>
					<u>4th Plug Complete</u>

# B. J. Hughes, Inc.

## Cementing Service Report

Farmington, New Mexico

Date 01-11-81

Company Columbine Exp. Corp.

Well No. #1, ERYNBURG

Formation \_\_\_\_\_

County SAN JUAN

State UTAH

BJ Service Foreman Tommy Thompson

Company Representative \_\_\_\_\_

REMARKS: Plug Job

5<sup>th</sup> @ 1300'

6<sup>th</sup> @ 360'

### WELL DATA

Hole Size: 6 1/4" Depth: 6316'

Casing Size: 4" Wt. 14 Depth 6316

Dlg. Fluid Type mud Wt. 9.1

Stage Collars: \_\_\_\_\_

Contractor: Cactus Drilling Co. Rig #20

### CEMENT DATA

NO. SACKS	YIELD Cu. Ft./Sx.	CEMENT MIX	VOLUME BBLs.	W
<u>25</u>	<u>1.171</u>	<u>Ideal CLASS "B"</u>	<u>15.6</u>	<u>18</u>

Volume of Displacement 5<sup>th</sup> 14 Bbl

Cement Circulated 6<sup>th</sup> 3.8 Bbl

Circulation During Job? yes

Trucks Used 1416-P 5377-B 6157-P4

TIME	RATE BPM	VOLUME BBL	PRESSURE		Job Detail
			TUBING	CASING	
<u>3:19</u>	<u>2</u>	<u>2</u>	<u>300</u>		<u>Start H<sub>2</sub>O Ahead</u>
<u>3:20</u>	<u>2</u>		<u>300</u>		<u>Start SLURRY</u>
<u>3:21</u>	<u>2</u>	<u>1</u>	<u>300</u>		<u>End</u>
<u>3:21</u>	<u>2</u>	<u>2</u>	<u>300</u>		<u>Fresh H<sub>2</sub>O pad</u>
<u>3:22</u>	<u>4</u>		<u>300</u>		<u>Start mud</u>
<u>3:25</u>	<u>4</u>	<u>14</u>	<u>300</u>		<u>End</u>
					<u>5<sup>th</sup> Plug Complete ✓</u>
<u>4:19</u>	<u>2</u>	<u>2</u>	<u>200</u>		<u>Start H<sub>2</sub>O Ahead</u>
<u>4:20</u>	<u>2</u>		<u>200</u>		<u>Start SLURRY</u>
<u>4:23</u>	<u>2</u>	<u>6</u>	<u>200</u>		<u>End</u>
<u>4:23</u>	<u>2</u>	<u>1</u>	<u>200</u>		<u>Fresh H<sub>2</sub>O pad</u>
<u>4:25</u>	<u>3</u>		<u>200</u>		<u>Start mud</u>
<u>4:25</u>	<u>3</u>	<u>3.8</u>	<u>200</u>		<u>End</u>
<u>4:25</u>					<u>6<sup>th</sup> Plug Complete ✓</u>
					<u>Job Complete!</u>

SCOTT M. MATHESON  
Governor



OIL, GAS, AND MINING BOARD

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Executive Director,  
NATURAL RESOURCES

CLEON B. FEIGHT  
Director

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING  
1588 West North Temple  
Salt Lake City, Utah 84116  
(801) 533-5771

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September 24, 1981

Tom McCarthy  
Petroleum Engineer  
Columbine Exploration Corporation  
Suite 718, Guaranty Bank Building  
817 17th Street  
Denver, Colorado 80202

RE: Inadequate plugging of  
Grynberg State #1

Dear Mr. McCarthy

Mr. Mike Minder and I have reviewed the information submitted to the Division of Oil, Gas and Mining detailing the plugging program for the Grynberg State #1.

After a thorough review of the information submitted it is our conclusion that the aforementioned well has been improperly plugged. Specifically, it is our determination that the small quantity of cement utilized and the stated plugging intervals are seriously inadequate. Rule D-1 states:

"(a) Before operations are commenced to plug and abandon any well drilled for the discovery of oil or gas, including any well drilled below the fresh water level, the owner or operator thereof shall give notice to the Commission of the intention to so plug and abandon such well and have the same approved. Said notice shall contain, among other things, the location of the well and when such plugging operations will commence. The notice shall be upon a form prescribed by the Commission, and shall contain all of the

information requested thereon; provided, however, that in cases of emergency the operator may obtain oral or telegraphic approval to plug and abandon, and of the method of plugging and abandoning the well. Within five (5) days after receiving oral or telegraphic approval, the operator shall file written notice as provided above.

(b) A dry or abandoned well must be plugged so that oil gas, water or other substance will not migrate through the well bore from one formation to another. Unless a different method and procedure shall be approved by the Commission, the method and procedure for plugging the well shall be as follows:

- (1) The bottom of the hole shall be filled to, or a bridge shall be placed at, the top of each producing formation open to the well bore, and a cement plug not less than one hundred (100) feet in length shall be placed immediately above each producing formation open to the well bore.
- (2) A solid cement plug shall be placed from fifty (50) feet below a fresh water zone, or a 100-foot cement plug shall be centered across the base of the fresh water zone and a 100-foot plug shall be centered across the top of the fresh water zone.
- (3) At least ten sacks of cement shall be placed at the surface so as to completely plug the entire hole. If more than one string of casing remains at the surface, all annuli shall be so cemented.
- (4) The interval between plugs shall be filled with heavy mud-laden fluid.
- (5) The hole shall be plugged with heavy mud up to the base of the surface string, at which point a plug of not less than fifty (50) feet of cement shall be placed.
- (6) Any perforated interval shall be plugged with cement and any open-hole porosity zone shall be adequately isolated to prevent migration of fluids.
- (7) A cement plug not less than one hundred (100) feet in length shall be centered across the casing stub if any casing is cut and pulled.

If a different rule of plugging is required under a Federal lease, it will be accepted by the Commission."